

TESTIMONY
OF
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TO
THE HOUSE APPROPRIATIONS SUBCOMMITTEE ON LABOR
HEALTH AND HUMAN SERVICES
EDUCATION AND RELATED AGENCIES

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Thank you for allowing me the opportunity to describe one state's experience with H1N1 2009. Many of the issues with which Alabama has dealt are generalizable to state public health agencies across the nation. I will focus on a few critical components of that response: surveillance, medical care capacity, and vaccine administration.

Surveillance

Since attempting to count each individual influenza case is an unproductive and incomplete exercise, Alabama like most states has developed an overlapping surveillance system to provide the most complete picture possible of H1N1 disease. We have established a network of sentinel physicians who report on a weekly basis the percentage of patients seen in their offices who have influenza-like illness (ILI) (fever, cough, or sore throat). Likewise, we have worked with the Alabama Department of Education to monitor school absenteeism over time. Using an information system funded with emergency preparedness dollars and designed initially to assist in tracking hospital capacity during disasters, we have identified the percentage of visits to hospital emergency rooms and the percentage of total admissions to hospitals that are due to ILI. Finally, to ensure an understanding of the circulating viral type, we have implemented a network of physicians who submit samples from ambulatory patients with ILI to the Alabama Department of Public Health Laboratory for PCR identification. In addition, our laboratory surveillance system focuses on samples from hospitalized patients with ILI and pregnant women.

School started in Alabama in mid-August. Within days of the onset of school, we began to observe the spread of ILI and H1N1 disease in our school system. In late August,

53 percent of schools had an absenteeism rate of greater than 5 percent. By late October, the percentage of schools with greater than 5 percent absenteeism had declined to 45 percent. Alabama's baseline for ILI in physician offices has historically been approximately 2.5 percent. The percentage of ILI in physicians' offices began to rise shortly after school began and by early September the percentage of ILI had exceeded 10 percent. Since then, ILI has remained elevated in physicians' offices peaking at 12.3 percent of physician office visits. Currently 9 percent of physician office visits are reported as ILI.

Likewise, elevations in emergency room (ER) visits due to ILI have been observed. In early September, 20 percent of ER visits were attributable to ILI. Currently 12 percent of ER visits are attributable to ILI. Since early September, ILI has accounted for 3.0-3.8 percent of all hospitalizations. Over the past three weeks it has remained constant at 3.0 percent. Surveillance of influenza specimens for viral type demonstrated that 99 percent of positive isolates over the past month are H1N1 2009. Geographically, Alabama has reported widespread influenza activity for nine consecutive weeks. At this point, surveillance suggests that while Alabama has an ongoing influenza outbreak, the magnitude of the outbreak may have peaked.

Medical Care Capacity

Utilizing the system which was developed to measure hospital capacity during disasters, we have monitored certain specific indicators of Alabama hospital capacity during the course of the current outbreak. Since early September, we have monitored the

availability of staffed hospital beds, adult ICU beds, pediatric ICU beds, adult medical beds, and pediatric medical beds. At no time has any bed availability been less than 20 percent. Both pediatric medical and pediatric ICU bed availability have hovered around 40 percent and current availability approaches 50 percent. Adult capacity has tended to be lower than pediatric capacity. General adult medicine and adult ICU bed availability has ranged between 20 and 25 percent.

In addition to monitoring medical care availability, we have also assisted with the deployment of antiviral medication. During the early phases of the outbreak, the Department received reports of pharmacists unable to obtain oseltamivir or zanamivir in local geographical areas; in addition, we received reports of patients who were indigent or were without insurance which paid for antiviral medication. In an effort to address temporal geographic shortages, as well as to meet the needs of indigent patients for antiviral medications, the Department created a web portal which allowed pharmacists and physicians to place orders for those medications. As of October 28, 2009, the Department has provided almost 100,000 courses of antiviral medication to 832 providers. The antiviral stockpile appears adequate based on the current burden of disease; however, as has been observed nationally the greatest strain on the formulary is in pediatric preparations.

VACCINE ADMINISTRATION

The Department formulated a vaccine administration strategy for Alabama based upon projections of vaccine supply provided to us by the Centers for Disease Control and Prevention. The estimates provided to the Department on September 27, 2009,

projected that Alabama would be able to order 802,938 doses of H1N1 vaccine by the week ending October 30, 2009. Based upon those projections, the Department began a sequential strategy that focused first on allocating vaccine to providers most likely to see the ACIP recommended target population. The next phase of that strategy, expected to begin in late October or early November, was school-based vaccination clinics intended to be completed about Thanksgiving. The final phase, as more vaccine became available, was to provide additional vaccine to private providers, to community vaccinators, such as pharmacies, and to county health departments to hold clinics for individuals in the target population who might not otherwise have been reached. This phase would also enable anyone who wished to reduce their risk of influenza to be vaccinated.

However, based upon projections of October 23, 2009, the amount of vaccine available to be ordered by Alabama prior to the first week of November was reduced from 802,938 to 397,381. Of this, only 276,000 doses were injectable. Given this dramatic delay in the release of vaccine, the Department was forced to reformulate its vaccine strategy. Instead of focusing vaccination efforts on the broader ACIP categories, the state has chosen to restrict its initial vaccination efforts to the subpriority groups identified by the ACIP to include:

- Pregnant women;
- Health care workers;
- Children 6 months of age to 4 years of age;
- Caregivers of children less than 6 months of age;

- Children 5-18 years of age with underlying medical conditions which put them at risk of complications.

Likewise, instead of attempting to provide vaccine to entities who serve the broader priority groups, we are now restricting vaccine distribution in the private sector to providers most likely to serve the target subpopulation. This includes OB/GYNs, pediatricians, family practice physicians, and hospitals. In the public sector to maximize the sites at which these target populations may receive vaccine, we are prioritizing vaccine distribution to federally qualified health centers and to county health departments. Our school-based vaccination efforts have now been delayed until late November or early December. In addition, given the limited amount of vaccine available, initial school vaccination efforts will focus on children less than 10 years of age, a group in need of two vaccinations for maximum protection.

Current projections show that 62 percent of Alabama's vaccine will not be available until after December 1. This is likely to lead to a delay in the provision of vaccine to the broader provider community until December and January. Assuming robust uptake of vaccine by individuals in the subpriority groups, there will be a delay in the expansion of vaccination efforts to the broader ACIP recommended groups. Based upon the current distribution schedule and assuming ongoing demand by the target population, it is likely that expanding the vaccine offering to all Alabamians who wish to reduce their risk of influenza may not be possible until late December or January.

LESSONS LEARNED

The most important lesson learned during the H1N1 outbreak is the need for timely and accurate information. The ability to observe the epidemic through multiple data sources (physician office visits, emergency department visits, and school absenteeism) has enabled us to gain a better prospective both of the temporal and geographical movement of the outbreak as well as the likely impact on the health care system.

Similarly, it is critical that estimates of vaccine delivery be realistic and credible. States develop their vaccination strategies based on those estimates. A change in those estimates has a profound ripple effect throughout the public health system. Therefore, any changes in vaccine delivery must be communicated immediately and clearly to the states to allow the states maximum opportunity to adjust their plans. Not only does a change in the available vaccine supply impact the scheduling of clinics, it also impacts the plans for public information campaigns. Any mass media campaign encouraging expanded vaccination, when the vaccine supply is so limited, would likely result in patients becoming more frustrated and disillusioned because of their inability to receive vaccine. In addition, the inability to provide the vaccinations will further undermine the credibility of the public health effort. Media campaigns must be timed to match the supply of the vaccine. If vaccine becomes more available in late November, media campaigns aimed at encouraging more broad vaccination have a much greater chance of success and patients have a greater chance of being vaccinated,

In summary, we feel that the surveillance system has provided sufficient information to allow Alabama to understand the magnitude and the severity of H1N1 2009 during the current influenza season. Likewise, while H1N1 has certainly increased health care

demands across the state, at no time has it resulted in critical shortages in any of our monitored resources. The antiviral stockpile has been extremely helpful in meeting needs due to temporal geographic shortages or the need to serve indigent patients. While vaccination efforts have begun in Alabama, the reduced release of vaccine forced the state to develop an alternative strategy. The lack of vaccine significantly limits the number of individuals we can currently vaccinate. Our long term vaccination success depends upon the continued interest of individuals in receiving vaccinations in December and January when vaccine will be more available.

Again, thank you Mr. Chairman and members of the committee for this opportunity to share our ongoing experience with H1N1 2009.